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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/919,430

Applicant(s)

HANSEN ET AL.

Examiner

John B. Walsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amdt of 4/26/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,10-20 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,10-20 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "the remote client". There is insufficient antecedent basis for this limitation in the claim. It appears the claim should recite "the terminal". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4, 5, 6, 10, 11 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,974,237 to Shurmer et al.

As concerns claim 1, a gateway (column 4, line 59); a switch (column 4, line 38); a data routing system (figure 4; communications network); a bandwidth measurement device (abstract, measure network performance; column 6, line 65-bandwidth is parameter measured) configured for independently determining upload or download data transfer rates between said remote

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client/terminal (30 is remote from other nodes in the network) and said gateway, and for distinguishing the upload or download data transfer rate between the remote client and the gateway from the upload or download data transfer rate between the remote client and the network (abstract, parameters of individual components of network, such that transfer rates for any leg/path of the system can be determined, such as from a client to a gateway and a client and a network; column 7, lines 10-13-receiving and sending, upload and download); a measurement application (column 5, lines 39-40; column 2, line 51-column 3, line 20-means for managing and means for collecting) resident on said bandwidth measurement device, said measurement application determining said upload or download data transfer rates for said bandwidth measurement device; and an applet (column 5, lines 39-42) maintained by said measurement application suitable for download (column 2, lines 54-55; column 3, lines 11-18) to said remote client; configured for independently determining upload or download data transfer rates between said remote client and said gateway, wherein if determining said upload data transfer rate between said client and said gateway, said downloaded applet generates said data packets (column 7, lines 11-14-interrogation signals) originating at said remote client (column 7, lines 10-14) and if determining said download data transfer rate between said gateway and said remote client, said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said remote client (column 7, lines 10-14).

As concerns claim 2, a router (column 8, lines 59-60-switch routes data).

As concerns claim 4, an ATM edge switch (column 8, lines 37-39; figure 19).

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As concerns claim 5, a service node is an internet service provider and said network is the Internet (column 4, line 59-world wide web).

As concerns claim 6, a server (column 5, line 15).

As concerns claim 10, wherein a web application resides on said bandwidth measurement server, said remote client accessing said measurement application via said web application (figure 8; signal presentation layer).

As concerns claim 11, wherein said bandwidth measurement server further comprises a measurement database (22) coupled to said measurement application, said measurement database maintaining data collected during measurement of said upstream and/or downstream data transfer rates.

As concerns claim 29, the upload or download transfer rate is compared to the baseline data transfer rate to determine if problems exist (column 7, lines 37-52).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,974,237 to Shurmer et al. as applied above.

As concerns claim 12, Shurmer et al. disclose all of the limitations (see claim 1 above) except for the xDSL lines. Shurmer et al. disclose the links may comprise a variety of

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communication connections (column 1, lines 20-23). This appears to be an obvious design choice since the network would work equally well with other communication lines and it does not appear to effect the patentable operation of the invention.

As concerns claim 13, a router (column 8, lines 59-60-switch routes data).

As concerns claim 14, a gateway (column 4, line 59).

As concerns claim 15, a terminal (figure 1; 7, 8) and said bandwidth measurement device is coupled to the router (coupled via the communication connections of the network).

As concerns claim 16, a server (column 5, line 15).

As concerns claim 17, a measurement application (figures 2 and 3; column 7, lines 27-45; column 5, lines 39-40; column 2, line 51-column 3, line 20-means for managing and means for collecting).

As concerns claim 18, wherein a web application resides on said bandwidth measurement server, said client accessing said measurement application via said web application (figure 8; signal presentation layer).

As concerns claim 19, wherein said bandwidth measurement server further comprises a measurement database (22) coupled to said measurement application, said measurement database maintaining data collected during measurement of said upstream and/or downstream data transfer rates.

As concerns claim 20, wherein said measurement database is further coupled to said web application, said service provider terminal accessing said data maintained in said measurement database through said web application (column 6, lines 29-30; column 6, lines 33-36-program communicates at least between client and server accessing data in the database).

Response to Arguments

7. Applicant's arguments filed April 26, 2007 have been fully considered but they are not persuasive.

The applicant argues Shurmer et al. do not disclose an apparatus for measuring downstream data transfer rates with a remote client station (p. 9). The examiner disagrees since Shurmer et al. disclose this limitation at least at column 9, line 12-rate of incoming and outgoing; column 2, lines 21-23-measure a plurality of elements in the network (wherein a client station is one of the elements in the network); column 6, lines 51-52-monitor links (wherein network links between the client and other elements are measured).

The applicant argues Shurmer et al do not teach or suggest "an applet maintained by said measurement application suitable for download to said remote client" (p. 9). The examiner disagrees since Shurmer et al. disclose this limitation at least at column 5, lines 39-40 (a program for operating the data monitoring apparatus) and column 6, line 33 (a control program on client station). The claim only functionally recites the applet on the client wherein the applet need only be "suitable for download" it is never actually recited in the claim as being downloaded and installed onto the client to operate. In view of this and with the claim given its broadest reasonable interpretation the program (i.e. an applet) is "suitable for download" since it is connected with the server and can download data with the client.

The applicant argues Shurmer et al. do not teach or suggest a remote client (p. 10). The examiner disagrees since Shurmer et al. disclose at least at column 5, lines 1-3 ("located at a site adjacent to a node element or at a site remote from a node element). Furthermore the term

“remote” is a relative term and the applicant has not established any claim language to set forth a point of reference for the client to be “remote” from.

The applicant argues there is no desirability set forth in Shurmer et al. for applicant’s invention (p. 11). In response to applicant’s argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is found in the knowledge generally available to one of ordinary skill in the art.

The applicant argues Shurmer et al. do not disclose a connection between an external network and a subscriber terminal for a network service, nor can it measure the bandwidth between a network gateway and such a subscriber terminal (p. 13). Shurmer et al. disclose measuring bandwidth on a link at least at column 6, line 64-bandwidth. Furthermore Shurmer et al. disclose a connection between an external network (column 4, line 58-gateway) and a terminal (client machine).

Shurmer et al. disclose measuring bandwidth between a network gateway and such a subscriber terminal at least at column 9, line 12-rate of incoming and outgoing; column 2, lines 21-23-measure a plurality of elements in the network (wherein a subscriber terminal and gateway are elements in the network); column 6, lines 51-52-monitor links (wherein network links

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between the terminals and other elements are measured); column 4, line 58-gateway; column 6, line 64-bandwidth.

The applicant argues Shurmer et al. only measure upstream network node performance (p.14). The claims only recite determining upload or download, not both the upload and download. Furthermore Shurmer et al. disclose measure both upload and download transfer rates (column 9, line 12).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

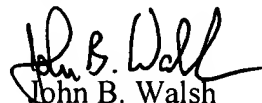
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John B. Walsh
Primary Examiner
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